

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A protected aluminum mass, comprising:
 - a bare aluminum mass; and,
 - an attached layer to the a surface of the bare aluminum mass comprising at least one carbon atom,
wherein said surface is a surface absent any oxidation.
2. (Currently Amended) The protected aluminum mass of claim 1, wherein the attached layer comprises a moiety selected from ~~the group consisting of at least one of a carboxylic acid derivative, alcohol derivative, thiol derivative, aldehyde derivative, and an amide derivative and combinations thereof.~~
3. (Currently Amended) The protected aluminum mass of claim ~~2~~ 1, wherein the ~~moiety~~ comprises attached layer is comprised of a moiety of a carboxylic acid derivative.
4. (Currently Amended) The protected aluminum mass of claim 1, wherein the bare aluminum mass comprises micron-size aluminum particles.
5. (Currently Amended) The protected aluminum mass of claim 1, wherein the bare aluminum mass comprises nano-size aluminum particles.
6. (Previously Presented) The protected aluminum mass of claim 1, wherein the attached layer comprises a monolayer.

7. (Currently Amended) The protected aluminum mass of claim 6 1, wherein the attached layer is a monolayer comprises comprised of a moiety of a carboxylic acid derivative.

8. (Currently Amended) The protected aluminum mass of claim 1, wherein the attached layer comprises from is comprised of about 3 carbon atoms to about 20 carbon atoms.

9. (Currently Amended) The protected aluminum mass of claim 8 1, wherein the attached layer comprises from is comprised of about 9 carbon atoms to about 12 carbon atoms.

10. (Currently Amended) The protected aluminum mass of claim 3 1, wherein the carboxylic acid derivative moiety comprises attached layer is comprised of a moiety of a perfluoroalkyl carboxylic acid.

11. (Currently Amended) The protected aluminum mass of claim 10, wherein the perfluoroalkyl carboxylic acid is selected from the group consisting one of $C_5F_9O_2H$, $C_9F_{17}O_2H$, $C_{10}F_{19}O_2H$ and $C_{14}F_{27}O_2H$.

12. (Currently Amended) The protected aluminum mass of claim 11 1, wherein the perfluoroalkyl carboxylic acid comprises $C_{14}F_{27}O_2H$.

13. (Currently Amended) The protected aluminum mass of claim 1, wherein the attached layer is present in a mass amount of from at least about a 5:1 or less molar ratio of aluminum to layer.

14. (Currently Amended) The protected aluminum mass of claim 1, wherein the attached layer comprises from at most about 85 weight percent or less of the total protected aluminum mass.
15. (Original) The protected aluminum mass of claim 1, wherein the attached layer includes at least one functional group.
16. (Original) The protected aluminum mass of claim 1, wherein the attached layer includes an energetic moiety.
17. (Original) An energetic material comprising the protected aluminum mass of claim 1.
18. (Currently Amended) A process for forming a protected aluminum mass, comprising the steps of:
 - forming an unprotected aluminum mass; and,
 - adding a layer forming reactant, wherein the layer forming reactant binds to the a surface of the aluminum mass as an attached protective layer,
wherein said surface is a surface absent any oxidation.
19. (Currently Amended) The process of claim 18, wherein the an aluminum composition for forming the unprotected aluminum mass comprises $AlH_3!NR_1R_2R_3$, and

wherein R₁, R₂ and R₃ are independently selected from one of a hydrogen or and an alkyl
having comprising from about 0 1 to about 10 carbon atoms, optionally in combination with at
least one or more heterocycles.

20. (Original) The protected aluminum mass produced by the process of claim 18.
21. (New) The protected aluminum mass of claim 1, wherein said attached layer binds to said surface.
22. (New) The protected aluminum mass of claim 1, wherein said attached layer binds to said bare aluminum mass.
23. (New) The protected aluminum mass of claim 1, wherein a covalent aluminum-oxygen bond is formed linking said attached layer and said bare aluminum mass.